

MASSACHUSETTS RARE AND ENDANGERED WILDLIFE

Roseate Tern *Sterna dougalli*

Description The adult Roseate Tern is a pale gray bird with a black capped head and black streaked primaries (outer feathers). It averages 15 1/2 inches (39.5 cm) in length and weighs about 113 g (4 oz.). Its cream colored underparts are tinged with pink and its white tail is long (18.4 cm) and deeply forked. Its legs are orange. For most of the year, the Roseate's bill is black with a red base. In May, the bill turns entirely black and in June and July the red band increases. Juveniles have silver upperparts patterned with narrow black V's. Their legs and bill are black and their head is black streaked with cream. The juvenile's underwing color is the same as the adult and its upper wing is primarily gray. The Roseate's harsh, rasping alarm call ("kreck, crack, or kraak") is distinctly louder and lower keyed than that of other terns and has been likened to the tearing of cloth. When undisturbed on the breeding grounds, its usual note is a soft, musical "kulick".

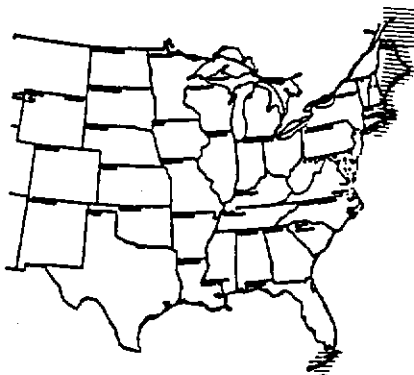



"Secretary," Massachusetts Audubon Society, Vol. 20, (4), 1990

Similar Species The Roseate Tern is distinguished from the Common Tern (*Sterna hirundo*) by its paler gray mantel, longer tail, and thinner body. Unlike the Common Tern, the Roseate's tail streamers extend beyond the end of its folded wings. Additionally, the Roseate Tern has a black bill with a reddish base while the Common Tern's is red with a black tip.

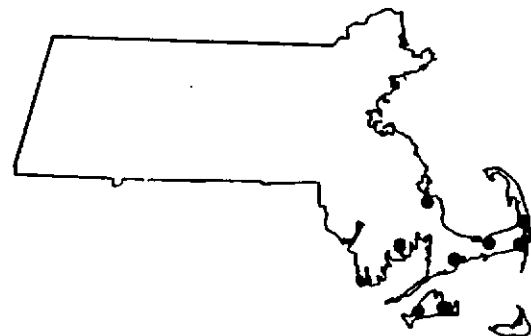
Range In North America, the Roseate Tern breeds in two discrete areas: from Nova Scotia to Long Island, New York, and From the Florida Keys and Bahamas through the Lesser Antilles. The wintering range of this species is less clearly defined. According to the American Ornithological Union, in the Americas, Roseates winter primarily in the eastern Caribbean from the West Indies southward ranging along the Atlantic coast of South America to eastern Brazil. Other sources suspect they may be pelagic in winter.

(continued overleaf)



 Breeding Range in U.S.

Distribution of Roseate Tern



● Verified since 1978
○ Reported prior to 1978

Breeding Distribution in Massachusetts
by Town

Migration Roseate Terns arrive in Massachusetts in early May, along with the other tern species. Their departure is a two-staged affair. They leave their nesting grounds at the end of August each year and congregate for about a month at a traditional site for roosting, feeding, and teaching their young. Toward the end of September, they leave en masse and head south.

Habitat in Massachusetts The Roseate Tern prefers islands, coastal beaches, and inshore waters. Occasionally, sand dunes on barrier spits accommodate this species. It has a preference for dense cover composed of herbaceous plants such as beach grass and seaside goldenrod.

Feeding Habits The Roseate Tern is a specialist preferring to feed on sand lance and small herring. Occasionally it will eat mackerel but rarely feeds on other fish or invertebrates. This bird feeds in a variety of areas. In Massachusetts, it has been reported feeding in the open ocean up to 1 km offshore and in sheltered bays or inlets up to 2 km offshore. The Roseate Tern feeds both alone and in the company of other terns. It procures its food by diving and by snatching up the small fish being chased by larger predatory fish.

Nesting and Breeding Habits The Roseate Tern is a colonial nester always found with Common Terns. Nests consist of scrapes hidden under or next to vegetation. The Roseate Tern has been found in vegetative cover over 1 meter high. Less frequently, nests have been found under rocks, boards, and other materials. Most birds begin breeding at 3 or 4 years of age. In Massachusetts, 1 to 2 spotted tan eggs are laid asynchronously between May 17 and June 12. Younger birds lay later into the season. Both parents participate in incubating the eggs and feeding and brooding the young. The young hatch after 23 days and fledge at 25 days of age. The young remain dependent on the parents at least 6 weeks after fledging.

Predation and Defense The Roseate Tern is extremely sensitive to predation and is not able to reproduce successfully if predators are present. Nesting on islands and in thick cover are strategies employed by this tern to reduce predation threats. However, the more aggressive and earlier nesting Herring and Great Black-backed Gulls often force the Roseate Tern from its island habitats to the mainland where they are vulnerable to predation by mammals and other birds. Owls, herons, foxes, raccoons, weasels, skunks, and rats commonly prey on eggs, hatchlings, and juveniles. Great Horned Owls will prey on the adults as well as on the eggs and young birds. When the terns flee from the owl, other nocturnal predators are able to raid the nests. Roseate Terns will attempt to discourage avian predation by mobbing, calling loudly, or attacking an intruder. Unlike the Common Tern, they do not exhibit strong defensive measures against mammals or humans.

Population Status The Roseate Tern is listed as "Endangered" by the U.S. Fish and Wildlife Service and the Massachusetts Division of Fisheries and Wildlife. Since 1935, there has been approximately a 70% decline in the number of Roseate Terns in northeastern North America. This species has declined from 8500 pairs in the 1930's to 2500 pairs in 1978. Massachusetts surveys from 1986 and 1987 indicate that the Roseate Tern population is remaining stable at about 1697 pairs.

Several important factors have been attributed to the precipitous decline in Roseate Tern populations in North America. Foremost is the encroachment of Herring and Great black-backed gulls on tern nesting grounds. Roseate Terns will not re-nest in areas where they have been unable to successfully raise a brood in previous years. In several instances, erosion, flooding, and alteration of nesting substrates have significantly reduced tern populations. This bird is additionally affected by human activity in its wintering range. Egg collecting and killing of the Roseate Tern for food occur in countries such as the U.S. Virgin Islands and Guyana.